

WHAT IS CLAIMED IS:

1. A transmission power control method of a forward-acknowledgement channel, comprising the steps of:

5 receiving packet transmission information in a base station; and

determining a power of a transmission signal transmitted via the forward-acknowledgement channel (F-ACKCH) using an increment for a reference transmission
10 power value of a boost mode in case that the packet transmission control information contains a boost operation.

2. The transmission power control method of claim 1, wherein the increment for the transmission power value
15 is determined according to a sub-packet identification (SPID) or service data unit length (SDU_length) transmitted via a reverse-packet data control channel.

3. The transmission power control method of claim 1, wherein the power of the transmission signal transmitted
20 via the forward-acknowledgement channel (F-ACKCH) is determined in a manner of adding the increment to the reference transmission power value of the boost mode if the signal is an acknowledgement (ACK).

25

4. The transmission power control method of claim

1, wherein the power of the transmission signal transmitted via the forward-acknowledgement channel (F-ACKCH) is determined in a manner of adding the increment to the reference transmission power value of the boost mode if
5 the signal is a non-acknowledgement (NACK).

5. An acknowledgement control method of a forward-acknowledgement channel, comprising the steps of:

receiving acknowledgement information in a mobile
10 station;

determining a boost mode threshold using an increment for a boost mode reference threshold in case of a boost mode operation; and

deciding a presence or non-presence of
15 acknowledgement using the threshold.

6. The acknowledgement control method of claim 5, wherein the increment for the reference threshold is determined according to a sub-packet identification (SPID) or service data unit length (SDU_length) transmitted via a
20 reverse-packet data control channel.

7. The acknowledgement control method of claim 5, wherein the increment for the reference threshold is
25 determined according to a sub-packet identification (SPID) and service data unit length (SDU_length) transmitted via a

reverse-packet data control channel.